

AMENDMENTS TO THE DRAWINGS

The attached sheets of drawings include changes to Figs. 2 and 3, which have been revised to add descriptive text labels to the elements in a manner similar to that of Fig. 1.

Attachments:

Replacement Sheet containing Figs. 1 and 2

Replacement Sheet containing Fig. 3

REMARKS

Re-examination and allowance of the present application is respectfully requested.

The Examiner objects to Figs. 2 and 3 of the drawings, indicating that short, descriptive text labels similar to the ones found in Fig. 1 should be added to Figs. 2 and 3. By the current amendment, Applicant submits replacement drawings that have been revised in accordance with the request of the Examiner. In view of the submission of replacement drawings, Applicant submits that the ground for the objection to the drawings no longer exist, and thus, respectfully requests withdrawal of this objection.

Claims 22 and 26-28 stand rejected under 35 U.S.C. § 112, second paragraph as being indefinite. With respect to claim 22, Applicant has amended the claim, paying particular attention to the concern raised by the Examiner. With respect to claims 26-28, Applicant submits that the ambiguity noted by the Examiner in these claims no longer exist in view of the revision of claim 21, which will be discussed below. Accordingly, Applicant respectfully submits that the grounds for the 35 U.S.C. § 112, second paragraph rejection no longer exists, and respectfully requests withdrawal of this rejection.

Applicant respectfully traverses the 35 U.S.C. § 103(a) rejection of claims 21-24 and 26-29 as being obvious over U.S. Patent No. 6,370,584 to BESTAVROS et al. in view of High Performance Networking by SPORTACK et al., further in view of TCP/IP Illustrated, Volume 1: The Protocols by STEVENS and further in view of U.S. Patent 5,031,089 to LIU et al..

According to an embodiment of the presently claimed invention, a switching module is connected to a first local network. Data is transferred via a switching interface of the server module to a second server module of a modularly designed server that is connected to a second local network. As shown in Fig. 2 of Applicants' drawings, modules 2 and 4 are connected to LAN 13 and modules 3 and 5 are connected to LAN 16. Each server module includes a routing calculator that uses a routing table. The routing table lists information about a utilization level of each module, i.e., of the first server module and the second server module.

The server modules of the disclosed embodiment have an integrated router function, and thus, do not require an independent router to forward data packets. See page 8, lines 31-34 of Applicant's specification. Using the integrated router function, the present invention detects the first modules connected to the first LAN and detects the second modules connected to the second LAN, and combine this data into a single routing table. The routing table is then used to transmit at least one data packet of a module connected to the first LAN via a switch, without an independent router, to one of the modules connected to the second LAN, based on the use of headers, as described, for example, at page 6, line 4 to page 7, line 4 and page 7, line 35 to page 8, line 29 of Applicant's specification.

Applicant respectfully submits that at least these features are lacking from the applied art of record.

Applicant submits that BESTAVROS merely discloses a group of servers that are connected via a shared local network having connections to a host and the internet. It is submitted that routing between a server device and a further server is established

only via the shared local network to which all server devices are connected. A forwarding to server devices connected to another network is established only via the internet, using, for example, IP addresses. Applicant submits that such a configuration requires the use of independent routers.

BESTAVROS discloses that a first group of host devices are connected to a first network and a second group of host devices are connected to a second network. Transmission of data of the second network is established via IP-address routing, such as, for example, by IPIP-encapsulation. See, for example, column 4, lines 34-41. Applicant submits that such a configuration requires the use of independent routers.

Thus, Applicant submits that the teaching of BESTAVROS differs from that of the presently claimed invention. Further, Applicant submits that BESTAVROS is silent with respect to the use of internal headers or integrated router functions in each host device, as is taught by Applicant's present invention. In this regard, BESTAVROS specifically discloses the use of Layer 3 elements, which teaches away from Applicant's present invention of the desirability of using faster and simpler switches (such as, for example, a Layer 2 switch), as is taught by Applicant's invention. See, for example, page 8, line 34 to page 9, line 3 of Applicant's specification.

It is further submitted that in BESTAVROS, group 36 of servers 38-44 and 46-52 does not correspond to Applicant's modularly designed server, as a data transmission is effected via the internet. On the other hand, as disclosed at, for example, page 5, line 15-17 of Applicant's specification, the server modules are connected to switch 7 via an internal data bus or data line 6.

Similarly, LIU describes a connection of a computer to a single network. Applicant submits that this document fails to disclose or suggest to one skilled in the art as to the connection of a computer or modular server with two networks.

Further, Applicant submits that the SPORTACK publication and the STEVENS publication each fail to disclose or suggest that which is lacking from BESTAVROS and/or LIU.

Thus, Applicant submits that if one attempted to combine the teachings of the above-applied references in the manner suggested by the Examiner, one would fail to arrive at the present invention, as defined by the claims. In particular, Applicant submits that if one attempted to combine the teachings of the various references in the manner suggested by the Examiner, one would fail to arrive at the presently claimed invention, as such a combination would lack at least a switching interface that connects the server module to a switching device of the modularly designed server to forward a data packet to a second server module of the modularly designed server, in which the switching interface includes a routing calculator that calculates an internal server module address using a routing table based upon a utilization level of data processors of the plurality of server modules of the modularly designed server, such that forwarding of the data packet requires no independent router.

In view of the above, Applicant submits that the ground for the 35 U.S.C. §103 rejection no longer exists, and respectfully requests withdrawal of this ground of rejection.

Applicant further submits new claims 30 and 31 specify that each server module of the plurality of sever modules are connected together via an internal data bus or data

line. As discussed above, Applicant submits that this feature, which is described at, for example, page 5 lines 15-17 of Applicant's specification, is neither disclosed or suggested by the applied art of record. Accordingly, Applicant submits that an additional ground exists for concluding that claims 30 and 31 are patentable over the applied art of record, and respectfully request such an indication from the Examiner.

SUMMARY AND CONCLUSION

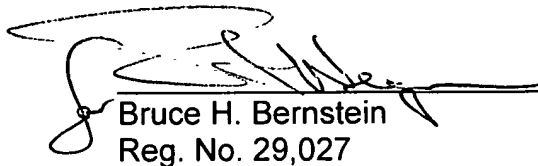
In view of the fact that none of the art of record, whether considered alone or in combination, discloses or suggests the present invention as now defined by the pending claims, and in further view of the above amendments and remarks, reconsideration of the Examiner's action and allowance of the present application are respectfully requested and are believed to be appropriate.

Any amendments to the claims which have been made in this amendment, and which have not been specifically noted to overcome a rejection based upon the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

Should an extension of time be necessary to maintain the pendency of this application, the Commission is hereby authorized to charge any additional fee to Deposit Account No. 19-0089.

Should the Examiner have any questions or comments regarding this Response, or the present application, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,
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